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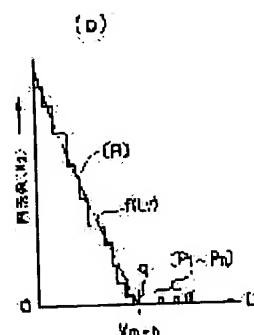
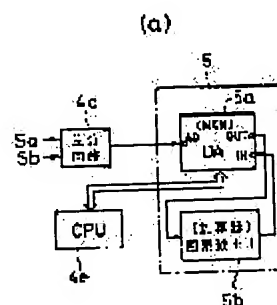
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(54) DETERMINATION OF OPTIMUM THRESHOLD VALUE FOR DETECTING FOREIGN MATTER

(57)Abstract:

PURPOSE: To provide a method for determining an optimum threshold value rapidly by computerized processing using a statistic technique in a wear foreign matter inspector.

CONSTITUTION: At every stage of the process of IC chips, optional adjacent chips on a wafer surface are selected for testing as test chips. These are tested by a foreign matter inspector and subjected to computerized processing to prepare a frequency distribution of pixel count N_g to the level L_v of each pixel signal, and an approximation curve $f(L_v)$ approximate to this frequency distribution is determined. The level of a pixel signal with an approximation curve of 0 is calculated to be an optimum threshold value V_{th} . This enables an optimum threshold value at every stage of the process to test chips to be determined by computerized processing and the optimum threshold value to be applied for IC chips at every stage of the process, thereby eliminating influences of patterns to detect foreign matters satisfactorily.



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